

Claims

1. A process for manufacture of optically pure (R) or (S) -5-(2-aminopropyl)-2-methoxybenzenesulfonamide by using a suitable diastereomeric salts of (R, S) -5-(2-aminopropyl)-2-methoxybenzenesulfonamide whose differential solubility properties exploited in a suitable solvent system at a suitable temperature range obtains desired optically phase (R)-(-)-5-(2-aminopropyl)-2-methoxybenzenesulfonamide, said process comprising resolving (R, S)- 5-(2-aminopropyl)-2-methoxybenzenesulfonamide with D-or L-tartaric acid to form a mixture of diastereomeric salts, separating the diastereomeric salts in any known manner in the presence of inert organic solvents of the kind such as herein described and contacting the individual salts so separated with base of the kind such as herein before described to provide said R -(-)-5-(2-aminopropyl)-2-methoxybenzenesulfonamide or S-(+)-5-(2-aminopropyl)-2-methoxybenzenesulfonamide, wherein the ratio of the polar solvent to alcoholic solvent varies from 5 to 20% (v/v), and said said resolution is carried out in a temperature range of 50-70°C.
2. A process as claimed in claim 1 wherein the ratio of (R, S)- 5-(2-aminopropyl)-2-methoxybenzenesulfonamide to tartaric acid is in the range of 1:1 to 1:1.1.
3. A process as claimed in claim 1 or 2 wherein resolution is carried out in two stages in presence of a solvent system consisting of alcoholic solvents coupled with varying ratios of polar solvents such as amidic solvents like dimethylformamide, N-methyl-2-pyrrolidone or dimethylsulfoxide or water.
4. A process as claimed in claim 1 wherein said resolution is preferably carried out at a temperature in the range of 60-65°C.
5. A process as claimed in any of the preceding claims wherein the said reaction time is between 4 to 26 hrs.
6. A process as claimed in any of the preceding claims wherein the inert organic solvent used for separating the diastereomeric salts to individual salts is selected from the group consisting of one or more of methanol, ethyl alcohol, propyl alcohol, water, dimethylformamide, N-methyl-2-pyrrolidone, dimethylsulfoxide.

7. A process as claimed in any of the preceding claim wherein the base is sodium hydroxide & the pH for isolation of free base is 9.5-10.
- 5 8. A process as claimed in any one of the preceding claims, whereby melting point of tartarate salt of more than 188⁰C is obtained after first stage operations.
9. A process as claimed in any one of the preceding claims, whereby an optically purity of more than >99.5% is obtained after second stage operations.
- 10 10. A process as claimed in any one of the preceding claims, wherein 5-(2-aminopropyl)-2-methoxybenzenesulfonamide is obtained in more than 90% optical purity from the second stage mother liquor.
- 15 11. A process whereby racemic (R,S) 5-(2-aminopropyl)-2-methoxybenzenesulfonamide is prepared in two step synthesis as shown in scheme: 2 from 5-acetonyl-2-methoxybenzenesulfonamide.